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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,490	02/06/2004	Jayendra H. Bheda	2003/03 USNA	6636

43693 7590 02/09/2007  
INVISTA NORTH AMERICA S.A.R.L.  
THREE LITTLE FALLS CENTRE/1052  
2801 CENTERVILLE ROAD  
WILMINGTON, DE 19808

EXAMINER
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TOSCANO, ALICIA

ART UNIT	PAPER NUMBER
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1712

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/773,490

Applicant(s)

BHEDA ET AL.

Examiner

Alicia M. Toscano

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-25 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-25, 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-3, 5-9, 13-17, 19-23 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (US 6342578) in view of Moeller (US 6630050).

This rejection is as set forth in the actions dated 10/23/06 and 6/27/06. See Remarks below.

2. Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Pfaendner (US 5693681).

Huang includes polyester compositions as disclosed in the previous action dated 6/27/06. Huang includes the use of polyethylene terephthalate. Huang does not disclose the use of polybutylene terephthalate, as required by the above Claims.

Pfaendner includes elements as discussed in the action dated 6/27/06. Pfaendner discloses the use of polyesters. Said polyester may be polyethylene terephthalate or polybutylene terephthalate (Column 4 Line 41). It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Huang the use of polybutylene terephthalate, as taught by Pfaendner, since it is recognized in the art as being functionally equivalent to polyethylene terephthalate.

Art Unit: 1712

3. Claims 11 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang and Moeller in view of Yamamoto (JP 06100767).

This rejection is as set forth in the actions dated 10/23/06 and 6/27/06. See Remarks below.

4. Claims 4, 13, 18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Savariar-Hauck (US 5695905).

This rejection is as set forth in the actions dated 6/27/06. See Remarks below.

***Response to Arguments***

***Response to Amendment***

5. Applicant's arguments filed 1/16/07 have been fully considered but they are not persuasive. Applicants argue that their claimed invention exhibits unexpected results by the use of substituted cyclic anhydrides. Applicants point to the specification, page 3, which relates to the use of liquid cyclic anhydrides. Applicant further directs Examiner to Table 1 pgs 10-11, portions copied into Applicants Remarks, which discloses differences in melting points of substituted vs. unsubstituted anhydrides. Applicants argue that "none of the unsubstituted and substituted cyclic anhydrides in Table 1 have functionally equivalent melting points". And further, that the melting point provides

Art Unit: 1712

unexpected versatility in processing conditions and stability of additives in the present invention.

Examiner disagrees with Applicants statement of functional equivalence. The anhydride, substituted or not, reacts with free hydroxyl groups on the polyester of Huang. Thus a substituted or unsubstituted anhydride functions equivalently in the reaction of Applicants Claims. Applicants argue the criticality of the melting point due to its versatility in processing said polyester. Examiner points out that Applicants Claims are compositional in nature. There are no processing steps in said Claims. As such, Applicants argument regarding the criticality of melting point due to processing steps is moot. Further, Examiner notes that Table 1 in Applicants Remarks discloses only a 10C difference in the melting point of glutaric and substituted glutaric anhydride. Examiner requests data showing unexpected results when utilizing said anhydrides.

The melting point of maleic anhydride (54-56C, from Table 1 spec) overlaps with the melting point of phenyl succinic anhydride (53-55C, Table 1 spec). Applicants argue the melting point is critical feature used to choose one anhydride from another. Applicants argue "none of the unsubstituted and substituted cyclic anhydrides in Table 1 have functionally equivalent melting point". Applicants further argue substituted anhydrides yield unexpected results when compared to unsubstituted anhydrides. As such, Examiner requires Experimental data showing unexpected results with using maleic anhydride vs. the use of phenyl succinic anhydride.

Finally, Examiner draws Applicants attention to the product data sheets from Sigma-Aldrich included with this action. The melting points of said anhydrides are

Art Unit: 1712

published. The melting points are not unexpected values. If one of ordinary skill wished to choose an anhydride for a process which required a specific melting point one would look to Sigma-Aldrich for property information regarding said anhydrides and choose the anhydride accordingly.

6. Applicant's amendment overcomes the 102(b) rejection over Claims 1, 2, 8, 10, 15, 22 and 24 in view of Pfaendner. New grounds of rejection on Claims 10 and 24 are above.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

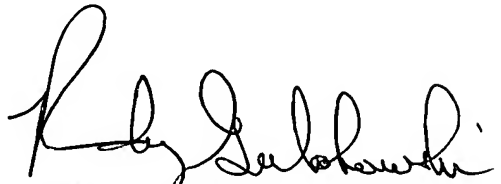
Art Unit: 1712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Toscano whose telephone number is 571-272-2451. The examiner can normally be reached on Monday to Friday 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMT



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